

GROUP III NITRIDE LED WITH UNDOPED CLADDING LAYER

ABSTRACT OF THE DISCLOSURE

The present invention is a semiconductor structure for light emitting devices that can emit in the red to 5 ultraviolet portion of the electromagnetic spectrum. The semiconductor structure includes a Group III nitride active layer positioned between a first n-type Group III nitride cladding layer and a second n-type Group III nitride cladding layer, the respective bandgaps of the first and 10 second n-type cladding layers being greater than the bandgap of the active layer. The semiconductor structure further includes a p-type Group III nitride layer, which is positioned in the semiconductor structure such that the second n-type cladding layer is between the p-type layer 15 and the active layer.

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